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The Law Office of Steven G. Roeder
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EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,295

Applicant(s)

SCHRECK ET AL.

Examiner

William J. Klimowicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-12,14-31,33,35-60 and 81-107 is/are pending in the application.
- 4a) Of the above claim(s) 11,12,17,19-22,25-30,42,43,47,49-51 and 54-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-10,14-16,18,23,24,31,33,35-41,44-46,48,52,53,59,60 and 81-107 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims Status

Thus, currently, the status of the claims are as follows:

Claims 1, 3, 13, 32, 34 and 61-80 have been voluntarily cancelled by the Applicants.

Claims 2, 4-12, 14-31, 33, 35-60 and 81-107 are currently pending.

Claims 11, 12, 17, 19-22, 25-30, 42, 43, 47, 49-51 and 54-58 are currently withdrawn from consideration as being drawn to a non-elected embodiment.

Response to Applicants' Comments Regarding the Restriction Requirement

In the Response filed on September 26, 2005, the Applicants "respectfully disagree with the conclusion of the Patent Office regarding the various embodiments described in the specification not being usable together." See page 14 of Applicants' response filed September 26, 2005.

The Applicants further state at page 14 bridging page 15 of their Response:

As provided in the specification, for example, "the second side surface 46 can be used for other purposes than storing data. For example, the second side surface 46 can be used for increasing rigidity, controlling airflow, damping vibration, decreasing imbalance, and/or filtering impurities. With these designs, the storage disk 18 is asymmetrical." (Page 7, lines 21-26; emphasis added). It is not required that each and every possible embodiment of the invention be illustrated in the figures, nor is it a requirement that the specification identify all possible combinations of the features of the invention. If the intent was that only the embodiments specifically illustrated comprise the entire invention, the above-quoted language in the specification would not have stated "and/or" but would simply have indicated "or". Thus, to say that these hybrid embodiments are "absolutely undisclosed" is inaccurate.

Whether the quoted conjunctive language is stated once or a plurality of times throughout the specification is also of no import, as long as it is stated. Therefore, the Applicants vehemently disagree with the position of the Patent

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Office that the features illustrated in the figures cannot be usable together in a single embodiment.

The Examiner respectfully, but vigorously and strenuously disagrees. The Applicants apparently allege that, in theory, it possible to use some of the Species identified by the Examiner together in an undisclosed combination.

These facts are at least clear.

Since there is absolutely no disclosure whatsoever in the specification, drawings, original claims, etc. that set forth a possible combination of the non-disclosed hybrid of Species combinations, the Applicants apparently must be implying that a person of ordinary skill in the art could combine a seemingly infinite number of permutations of the disclosed species into various undisclosed combinations without undue experimentation. This reasoning is gleaned from the Applicants' continual assertion that although there are undisclosed combinations, they implicitly exist based on the term "and/or" linking functions of separately disclosed and exclusive structures.

Based on such an implied admission, can it be assumed that if the Examiner finds two separately disclosed species, that one of ordinary skill in the art would readily recognize the ability to combine such diverse and distinct embodiments? Apparently according to the Applicants' logic, such a query must be answered in the affirmative.

Moreover, still, it appears as if the end-all, be-all phrase that the Applicants are relying on to link all undisclosed hybrid species, i.e., "the second side surface 46 can be used for other purposes than storing data. For example, the second side surface 46 can be used for increasing rigidity, controlling airflow, damping vibration, decreasing

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imbalance, and/or filtering impurities” (emphasis added) could be broadly construed as reading on a *single* disclosed embodiment. That is, for example, Figure 3C of the Applicants’ disclosure discloses an asymmetrical disk, having a second side surface which can be used for increasing rigidity (via stiffeners, **356C**), controlling airflow (via stiffeners, **356C**), damping vibration (via stiffeners, **356C** which increase rigidity and hence reduce vibrations), decreasing imbalance (via stiffeners, **356C** which can be added to an unbalanced side of the disk), AND filtering impurities (via stiffeners, **356C**, which can redirect airflow to filters within the disk drive). It thus appears that one disclosed embodiment can achieve all such functional results based on its sole structure.

This logic is sound, based on the fact that the Species I-XII have not in any way been described as usable together in a single combination, or subcombination, as *originally disclosed*. Moreover, as is peppered throughout Applicants’ original disclosure, the distinct Species identified by the Applicants corresponding to the Figures are expressly referenced as “another embodiment,” “yet another embodiment,” “still another embodiment,” etc.

Moreover still, the Examiner notes that the Species I-XII, which have been painstakingly described by the Applicants in rich and full detail and illustrations, have not in any way been described as usable together in a single combination, or subcombination, and in fact, possible combinations of a hybrid Species, would indeed potentially rise to the level of new matter since there is absolutely no disclosure of the separate and distinct Species being usable together in a single combination and/or subcombination, as *originally disclosed*.

The Applicants have previously alleged that the separately disclosed, distinct species are connected in a conceptual fashion.

The Examiner certainly does not disagree with the Applicants on this point. In fact, generally, all species are connected in some manner or fashion; e.g., eating utensils include separate and distinct species including knives, forks and spoons, all “connected” by the general concept of manual implements used mainly in the consumption of food.

The Applicants general connection among the separately disclosed and distinct species includes the general concept of an asymmetrical disk.

As it pertains to the separate and distinct eating utensils example, however, the spoon is indeed a separate and distinct species, that differs in structure when contrasted with the fork or knife, and vice versa.

The Applicants then begin to speculate about the possibility of merging distinctly and separately disclosed Species for which proposed merger there is absolutely no suggestions, express or implied, teachings or motivation to do so in Applicants’ originally filed disclosure. This would be akin to filing a patent application initially disclosing, depicting and a providing a detailed description of the separately disclosed and distinct eating utensils (e.g., spoon, fork and knife), and then at a later date, after the fact, contemplating a novel invention merging the spoon and fork to create a “spork” (spoon with the prongs of a fork at a distal end) and proclaiming that such a “spork” was within the bounds of Applicants’ original scope of invention simply because Applicants listed writing utensils capable of spooning, cutting and/or picking up food, when there exists no prior suggestion to create such a novel and undisclosed “spork.”

In fact, the originally filed claims (80 originally filed claims) do not set forth the merging of the now envisioned “hybrid species” or any hybridization of any of the distinctly disclosed and separate species of asymmetrical disks.

As an example, original claim 10, which depends from claim 2, recites structure pertaining to a “stiffener.” Claims branch 10 also includes claims dependent from (directly or indirectly) claim 10, which are 11-15. In none of those claims, is there recitation of structure, wherein the “stiffener” embodiment is merged with the separate and distinct species pertaining to “projections,” (FIGS. 5A, 5B) or an “adsorption layer” (FIG. 7A) or a “supplemental layer” (FIG. 6), etc.

Indeed, just the opposite is blatantly apparent - there are formed differing, *separate and distinct claim branches* for *each* of the separately disclosed and distinctly described and depicted embodiments - “stiffener” embodiment (e.g., see, *inter alia*, separate and distinct claim branch encompassing claims 10-18), the “projections” embodiment (FIGS. 5A, 5B) (e.g., see, *inter alia*, separate and distinct claim branch encompassing claims 23-24), an “adsorption layer” embodiment (FIG. 7A) (e.g., see, *inter alia*, separate and distinct claim branch encompassing claims 27-29), a “dampening” embodiment (FIGS. 4A and 4B) (e.g., see, *inter alia*, separate and distinct claim branch encompassing claims 19-22) or a “supplemental layer” embodiment (FIG. 6), (e.g., see, *inter alia*, separate and distinct claim branch encompassing claims 25-26) etc.

The Applicants had every opportunity while drafting the specification and originally filed plethora of claims to create even one claim branch which expressly sets forth some merging of species or yet, even suggest a possible combination of the disclosed separate and distinct species in the detailed written description; there is simply none.

The Applicants merely point to the functional word “and/or,” which if the Applicants are to be believed, allows them free rein to contemplate, speculate, and create novel and undisclosed hybrid species which are completely unsupported based on the Applicants’ disclosure as originally filed with the U.S. Patent Office (disclosure including the Applicants’ originally filed drawings, description, abstract and multitude of originally filed claims (80 claims)). The Applicants’ original disclosure, inclusive of the abstract, claims and drawings speak for themselves. Not only does the preponderance of the facts weigh heavily in favor against such hypothesized, after-the fact hybridly merged species, it does so beyond a shadow of ambiguity.

The Examiner is not advocating that, generally speaking, species cannot be combined in a general sense, to create hybrid species; but in the instant application, there is simply no factual basis, express or implied, for such undisclosed and after-the-fact manipulation to create such a hybridization of species.

Additionally, once again, it is noted that the Applicants **did not traverse on the ground that the species are not patentably distinct**. If the Applicants were to traverse on the ground that the species are not patentably distinct, the Applicants should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. If the Applicants were to include such a statement, the *election requirement would be withdrawn*. In either instance, however, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

Moreover, it is noted that claims 13 and 43 are directed to a non-elected Species IV (see Restriction Requirement, Paper No. 3, mailed October 9, 2003).

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Thus, in summary, after a reconsideration of the Applicants' arguments in the Petition filed on March 8, 2004 and again filed on September 26, 2005, the Examiner maintains the restriction between Groupings I and II, and Species I-XII as set forth in the original restriction requirement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 5-10, 14-16, 18, 23, 31, 35-40, 44-46, 48, 52, 59, 60, 81, 82, 85-87, 89, 90, 93-95, 97-104, 106 and 107 are rejected under 35 U.S.C. 102(b) as being anticipated by Boutaghou et al. (WO 99/05672 A1).

As broadly set forth in claims 81, 98 and 106, Boutaghou et al. (WO 99/05672 A1) discloses a disk drive (e.g., COL. 1, line 48 through COL. 2, line 24 of corresponding US Patent No. 6,125,099, which exemplifies a conventional disk drive usable in association with the disk depicted in FIG. 3a) and a method of making such, including a drive housing, as per claim 60, (inherently provided); and an asymmetrical storage disk (FIG. 3a) that is rotatably coupled to the drive housing - via a conventional spindle motor (11), the storage disk (10) having a body region (middle portion of (22) between (28) and (24) as seen in FIG. 3a) and only one data storage layer (e.g., 24 - see COL. 4, lines 49-50) that is fixedly coupled to the body region during non-rotation of the storage disk (i.e., the disclosed single-sided data disk in FIG. 3a).

As broadly set forth in claims 2, 31 and 99, Boutaghou et al. (WO 99/05672 A1) discloses the storage disk (e.g., FIG. 3a) for the disk drive, the storage disk (e.g., FIG. 3a) comprising: a body region (middle portion of (22) between (28) and (24) as seen in FIG. 3a); a first side region (inclusive of layers (24, 26)) secured to the body region (middle portion of (22) between (28) and (24) as seen in FIG. 3a); and a substantially opposed second side region ((28 and/or portions of (22) provided on top of (28))), which is secured to since the surface region is unitarily a part of the middle portion of (22) between (28) and (24) as seen in FIG. 3a, wherein only one of the side regions includes a data storage layer (24), and wherein the body region and the side regions are asymmetrical relative to the body region (see FIG. 3a).

As per claim 5, wherein the first side region includes a magnetic layer or data storage layer (24), and the second side region does not include a magnetic layer (data storage layer) - FIG. 3a.

As per claims 6, 35 and 100, wherein the second side region includes a layer (outermost layer of (22) between (28) and the exposed lowermost surface thereof and/or (28) itself, wherein the first layer (24 and/or 26) and the second layer being "substantially" equidistant from the body region (middle portion of (22) between (28) and (24) as seen in FIG. 3a) and wherein the layers (26/24 are different in composition than outermost layer (22) and/or (28).

As per claims 7, 36 and/or 8, 37 and/or 9, 38, and/or 101, as is evident from the Figure 3a, the first side region (24, 26) has a mass/density/thickness that is different than a mass/density/thickness of the second side region - due to the differing compositions and makeup of layers (22, 24, 26 and 28), the of the layers are different of the magnetic layer is more than the mass of the exposed surface of substrate (10a), which is nearly negligible in mass, weight and

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density.

As per claims 10, 39 and 102, wherein the second side region includes a stiffener (28) that increases the rigidity of the storage disk.

As broadly set forth in claims 14 and 44, the stiffener(s) of the disk of Boutaghou et al. (WO 99/05672 A1) can be said to redirect fluid within the drive housing during rotation of the storage disk. More concretely, since the disk includes stiffener (28), the stiffener affects the mass/density and/or thickness relative to a conventional disk without the stiffener, and thus, *relative* to such a disk without the stiffener, the disk with the stiffener (28) affects the air flow by virtue of the additional thickness/mass/density during rotation, *relative* to the conventional disk within the same type of housing without the stiffener (28)

As per claims 15, 45, 104 and 106, wherein the stiffener (that is, a portion of the concentric portion of stiffener (28)) is substantially arc-shaped - see Figures 4-5.

As per claims 16 and 46, wherein the storage disk includes a plurality of stiffeners (radial portions and/or differing concentric portions) that increase the rigidity of the storage disk.

As per claims 18, 40 and 48, wherein the second side region includes an outer flat section (middle flat portion of (22) between (28) and (24) as seen in FIG. 3a) and wherein each of the stiffeners (28) is raised above the outer flat region toward the "bottom" of the disk as seen in FIG. 3a.

As per claims 23 and 52, wherein the second side region includes an outer (outer relative to a lowermost surface of layer (24)) flat section (middle flat portion of (22) between (28) and (24) as seen in FIG. 3a) and a plurality of projections (portions of (28) that include the vertical thickness thereof) that extend above the outer flat section.

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As per claim 59, wherein the first side region has a first shape and the second side region has a second shape, and wherein the first shape is different than the second shape (that is the second region includes (28), which is certainly different in shape than say, layer (24 and/or 26).

As per claims 82 and 90, wherein the side regions are not spaced apart from the aforementioned body region - see FIG. 3a.

As per claims 85, 93 and 107, wherein the storage disk includes an inner diameter and an outer diameter, and wherein the stiffener (28) extends substantially between the inner diameter and the outer diameter - FIGS. 4 and 5.

As per claims 86, 94 and 103, wherein the stiffener (28) at least partly forms an outer ridged section that cantilevers in a direction away from the body region (middle flat portion of (22) between (28) and (24) as seen in FIG. 3a).

As per claims 87 and 95, wherein the outer ridged section has a top surface that is fully exposed (e.g., see COL. 7, lines 38-41) within the drive housing.

As per claims 89 and 97, wherein the plurality of stiffeners (36-43) are non-concentric.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 24, 33, 41, 53, 83, 84, 88, 91, 92, 96 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boutaghoul et al. (WO 99/05672 A1).

See the description of Boutaghou et al. (WO 99/05672 A1), *supra*.

As per claims 4 and 33, the second side region does not include any servo sectors (since it is not adapted to store data of any kind). However, Boutaghou et al. (WO 99/05672 A1) remains silent with respect to wherein the first side region includes a plurality of servo sectors on its data side.

Official notice is taken that servo sectors on magnetic information disk media of the type disclosed by Boutaghou et al. (WO 99/05672 A1), are notoriously old and well known and ubiquitous in the art; such Officially noticed fact being capable of instant and unquestionable demonstration as being well-known.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk, as taught by Boutaghou et al. (WO 99/05672 A1), with a servo sector within data-side (24) as is conventional and ubiquitous.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the disk, as taught by Boutaghou et al. (WO 99/05672 A1), with a servo sector within data-side (24) as is conventional and ubiquitous in order to accurately position a requisite transducing head of Boutaghou et al. (WO 99/05672 A1) on the intended data track to record/reproduce information in an accurate manner, as is well known, established and appreciated in the art.

As per claims 24, 41, 53 and 88, 96, 105, although Boutaghou et al. (WO 99/05672 A1) remains silent with respect to the particular dimensions of the disk, including wherein at least one of the projections (vertical thickness of stiffener (28)) is raised above the outer flat region (middle flat portion of (22) between (28) and (24) as seen in FIG. 3a) by at least approximately

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0.001 millimeters (claim 24, 41, 53) or 10 microns (claims 88, 96 and 105), it is notoriously old and well known in the disk and disk drive art to routinely modify a disk structure in the course of routine optimization/ experimentation and thereby obtain various standard optimized relationships including those set forth in claims 24, 41, 53, 88, 96 and 105.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the disk of Boutaghou et al. (WO 99/05672 A1) have at least one projection (28) being a minimum of 0.001 millimeter or 10 microns above the flat surface (as per claims 24, 41, 53 and 88, 96, 105 respectively).

The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the disk of Boutaghou et al. (WO 99/05672 A1) have at least one projection (28) being a minimum of 0.001 millimeter or 10 microns above the flat surface (as per claims 24, 41, 53 and 88, 96, 105 respectively) in order to generate the desired sufficient rigidity and/or stiffness of stiffener portions (28) as required by the disk of Boutaghou et al. (WO 99/05672 A1).

As per claims 83, 84, 91 and 92, although Boutaghou et al. (WO 99/05672 A1) remains silent with respect to the particular mass differential among the first and second side regions, given the addition of a stiffener (28), it would have been obvious in the course of routine optimization/ experimentation and thereby obtain various standard optimized relationships including those set forth in claims 83, 84, 91 and 92.

The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the disk of Boutaghou et al. (WO 99/05672 A1) have at the prescribed first and second region mass differentials as per claims 83, 84, 91 and 92 in order to increase the strength of the

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stiffener by using a larger mass element as stiffener (28). Keep in mind that the weight/mass of a magnetic layer is almost if not nearly completely negligible relative to a discrete and larger disk stiffener made of the materials espoused by Boutaghou et al. (WO 99/05672 A1).

Moreover, “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 105 USPQ 233, 235 (CCPA 1955).

Additionally, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claims 24, 41, 53, 83, 84, 88, 91, 92, 96 and 105 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Response to Arguments

Applicants' arguments with respect to the pending rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

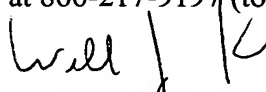
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William J. Klimowicz
Primary Examiner
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WJK